

04-04-07

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Docket No. 2629-4036

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

No.: 10/735,082 Confirmation No.: 1602

Applicant(s): James G. Lazar, et al. Group Art Unit: 1631

Examiner: TBA

Filed: December 11, 2003

Customer No.: 27123

For: IMMUNOLOGICAL DETECTION OF RNA:DNA HYBRIDS ON MICROARRAYS

**EXPRESS MAIL CERTIFICATE**

Mail Stop Amendments  
Commissioner for Patents  
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Date of Deposit: April 2, 2007

I hereby certify that the following attached paper(s) and/or fee

1. Supplemental Information Disclosure Statement (3 pages);
2. Form PTO-1449A (1 pg.) with 1 US Patent cited reference (not included) and 15 foreign cited references;
3. Form PTO-1449 B (4 pgs.) with 46 cited non-patent references; and
4. Return receipt postcard.

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Jafet Cotto

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is filed in accordance with 37 C.F.R.

§§1.56, 1.97 and 1.98. The items listed on Form PTO-1449, a copy of which is enclosed, are made of record to assist the Patent and Trademark Office in its examination of this application.

The Examiner is respectfully requested to fully consider the items and to independently ascertain their teaching.

1. ☒ For each of the following items listed on the enclosed copy of Form PTO-1449B that is not in the English language, an English language translation of that item or a portion thereof or a concise explanation of the relevance of that item is enclosed:  
Khrapko, et al., "Hybridization of DNA with Oligonucleotides Immobilized in Gel: A Convenient Method for Detecting Single Base Substitutions," Mol Biol (Mosk) (USSR) 25(3):718-730 (translation page No. 581-591) (1991)
2. ☐ For each of the following items listed on the enclosed copy of Form PTO-1449 that is not in the English language, a concise explanation of the relevance of that item is incorporated in the specification of the above-identified application.
3. ☐ Any copy of the items listed on the enclosed copy of Form PTO-1449 that is not enclosed with this Information Disclosure Statement was previously cited by or submitted to the Patent and Trademark Office in application Serial No. \_\_\_\_\_, filed \_\_\_\_\_.
4. ☒ No fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with:

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- ☐ 37 C.F.R. §1.97(b)(1), within three months of the filing date of a national application other than a CPA; or
- ☐ 37 C.F.R. §1.97(b)(2), within three months of the date of entry into the national stage as set forth in §1.491 in an international application; or
- ☒ 37 C.F.R. §1.97(b)(3), before the mailing date of a first Office action on the merits; or
- ☐ 37 C.F.R. §1.97(b)(4) before the mailing date of a first office action after the filing of an RCE under §1.114.
5. ☐ No fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(c), after the period specified in paragraph 4 above but before the mailing date of a final action or a Notice of Allowance (where there has been no prior final action), and is accompanied by one of the certifications pursuant to 37 C.F.R. §1.97(e) set forth in paragraph 9 below.
6. ☐ A fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(c), after the period specified in paragraph 4 above but before the mailing date of a final action or a notice of allowance (where there has been no prior final action):
- ☐ A check in the amount of \$180.00 is enclosed in payment of the fee.
- ☐ Charge the fee to Deposit Account No. **13-4500**, Order No. \_\_\_\_\_. A  
DUPLICATE COPY OF THIS SHEET IS ATTACHED.
7. ☐ A fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(d), after the mailing date of a final action or a notice of allowance, whichever comes first, but before payment of the issue fee, and is accompanied by:
- a. one of the certifications pursuant to 37 C.F.R. §1.97(e) set forth in paragraph 9 below; and
- b. the fee due under 37 C.F.R. §1.17(p) which is paid as set forth in paragraph 11 below.
8. ☐ This Information Disclosure Statement is being filed in compliance with:
- a. ☐ 37 C.F.R. §1.313(b)(3) or §1.313(c)(1), after the issue fee has been paid and information cited in this Information Disclosure Statement may render at least one claim unpatentable and is accompanied by the attached Petition To Withdraw Application From Issue and fee pursuant to 37 C.F.R. §1.17(h);
- b. ☐ 37 C.F.R. §1.313(c)(2) or §1.313(c)(3), after the issue fee has been paid and information cited in this Information Disclosure Statement is to be considered in a Request for Continued Examination (RCE) or a Continuation application upon abandonment of the instant application and is accompanied by the

attached Petition To Withdraw Application From Issue and fee pursuant to 37 C.F.R. §1.17(h).

- c. ☐ The fee due under 37 C.F.R. §§1.17(h) is paid as set forth in paragraph 11 below.
9. ☐ I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- ☐ I hereby certify that no item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
10. ☐ This document is accompanied by ☐ a Search Report ☐ Communication which was cited in a corresponding ☐ PCT or ☐ Foreign counterpart application
11. ☐ A check in the amount of \$ \_\_\_\_\_ is enclosed in payment of the fees due under 37 C.F.R. §§1.17(h) and 1.17(p).
- ☐ Charge the fees due under 37 C.F.R. §§1.17(h) and 1.17(p) to Deposit Account No. 13-4500, Order No. \_\_\_\_\_. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.
- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required for this Information Disclosure Statement, or credit any overpayment to Deposit Account No. 13-4500, Order No. 2629-4036. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: April 2, 2007

By: \_\_\_\_\_

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FORM PTO-1449A INFORMATION DISCLOSURE CITATION	Attorney Docket: 2629-4036	Serial No.: 10/735,082
	Applicant: James G. Lazar, et al.	
	Filing Date: December 11, 2003	Group Art Unit: 1631


## U.S. PATENT / PUBLICATION DOCUMENTS

Examiner Initial	Patent/Publication Number	Publication/Issue Date	Name	Filing Date
/JSB/	1. 6,686,151	February 3, 2004	Lazar et al.	November 6, 2000

## FOREIGN PATENT DOCUMENTS

Examiner Initial	Patent Number	Publication Date	Country	Copy Filed	Translation
	2. EP 0 288 737 duplicate	Nov. 1988	EP	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
/JSB/	3. EP 0 480 289 B1	12 Mar. 1997	EP	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Abstract <input type="checkbox"/> N/A
/JSB/	4. GB 2 279 954 A	18 Jan. 1995	GB	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
/JSB/	5. JP 04-4267897 A	24 Sep. 1992	JP	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Abstract <input type="checkbox"/> N/A
	6. WO 93/10263 duplicate	7 May 1993	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
/JSB/	7. WO 96/24694	15 Aug. 1996	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
/JSB/	8. WO 97/10364	20 Mar. 1997	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
	9. WO 97/31256 A2 duplicate	28 Aug. 1997	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
/JSB/	10. WO 97/31256 A3	28 Aug. 1997	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
	11. WO 99/29909 duplicate	7 Jun. 1999	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
	12. WO 99/32634 duplicate	Jul. 1999	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
	13. WO 99/36371 duplicate	27 Jul. 1999	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
	14. WO 99/39001 duplicate	2 Aug. 1999	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
	15. WO 99/40224 duplicate	2 Aug. 1999	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
	16. WO 00/60116 duplicate	Oct. 2000	WO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input checked="" type="checkbox"/> N/A
				<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Abstract <input type="checkbox"/> N/A
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Examiner /John S. Brusca/	Date Considered 05/10/2007
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

FORM PTO-1449B		Attorney Docket: 2629-4036	Serial No.: 10/735,082
		Applicant: James G. Lazar, et al.	
		Filing Date: December 11, 2003	Group Art Unit: 1631
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Citation No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
/JSB/	1.	Arnold et al., "Assay Formats Involving Acridinium-Ester-Labeled DNA Probes," Clin. Chem., 35/8, 1588-1594 (1989).	
duplicate	2.	<del>Blais B.W. 1994 "Transcriptional Enhancement of the Listeria monocytogenes PCR and Simple Immunoassay of the Product Using Anti-RNA:DNA Antibodies" Appl. Environ. Microbiol. 60:348-352.</del>	
duplicate	3.	<del>Boguslawski, et al., "Characterization of monoclonal antibody to DNA-RNA and its application to immunodetection of hybrids," J. Immunol. Methods 89:123-130 1986.</del>	
duplicate	4.	<del>Coutlee et al., 1989 "Immunodetection of DNA with Biotinylated RNA Probes. A Study of Reactivity of a Monoclonal Antibody to DNA-RNA Hybrids" Anal. Biochem. 181:96-105.</del>	
duplicate	5.	<del>Coutlee et al. 1991 "Immunodetection of DNA with Biotinylated RNA Probes. A Study of Reactivity of a Monoclonal Antibody to DNA-RNA Hybrids" Anal. Biochem. 198:217 (Published erratum).</del>	
duplicate	6.	<del>Coutlee et al., 1989 "Nonisotopic Detection of RNA in an Enzyme Immunoassay Using a Monoclonal Antibody Against DNA-RNA Hybrids" Anal. Biochem. 81:153-162.</del>	
duplicate	7.	<del>Coutlee et al., 1990 "Quantitative Detection of Messenger RNA by Solution Hybridization and Enzyme Immunoassay" J. Biol. Chem. 265:11601-11604.</del>	
duplicate	8.	<del>Coutlee et al., 1991 "Detection of Transcripts of Human Papillomaviruses 16 and 18 in Cancer-Derived Cell Lines and Cervical Biopsies by Enzyme Immunoassay for DNA-RNA Hybrids Following Solution Hybridization" J. Clin. Microbiol. 29:968-974.</del>	
duplicate	9.	<del>Coutlee, et al., "Comparison of Colorimetric, Fluorescent, and Enzymatic Amplification Substrate Systems in an Enzyme Immunoassay for Detection of DNA-RNA Hybrids," J. Clin. Microbiol. 27(5):1002-1007 1989.</del>	
/JSB/	10.	Engleberg, N.C., "Nucleic Acid Probe Tests for Clinical Diagnosis- Where Do We Stand? Features, Vol. 57, No. 4, 183-186, 1991.	
/JSB/	11.	Gerry NP. et al., "Universal DNA Microarray Method for Multiplex Detection of Low Abundance Point Mutations" Journal of Molecular Biology, Vol. 292, pages 251-262, September 19, 1999.	
/JSB/	12.	Grunstein, et al., "Colony hybridization: A method for the isolation of cloned DNAs that contain a specific gene," Proc. Natl. Acad. Sci. USA 72(10):3961-3965 (1975).	
/JSB/	13.	Guo, et al., "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports," Nucleic Acids Res. 22(24):5456-5465 (1994).	
	14.	<del>Hames &amp; Higgins, Nucleic Acid Hybridization: A Practical Approach (IRL Press Limited, Oxford, England. 1985). no copy provided</del>	
no copy provided Hermanson, et al., eds. Immobilized Affinity Ligands (Academic Press, New York), 1992.			
Examiner Signature	/John S. Brusca/	Date Considered	05/10/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>FORM PTO-1449B</b>  <b>INFORMATION DISCLOSURE</b> <b>CITATION</b>		Attorney Docket: 2629-4036	Serial No.: 10/735,082
		Applicant: James G. Lazar, et al.	
		Filing Date: December 11, 2003	Group Art Unit: 1631
		<b>NON PATENT LITERATURE DOCUMENTS</b>	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
/JSB/	16.	Ishikawa, et al., "Enzyme-Labeling of Antibodies and their Fragments for Enzyme Immunoassay and Immunohistochemical Staining," J. Immunoassay 4(3): 209-327 (1983).	
/JSB/	17.	Itakura, et al., "Synthesis and Use of Synthetic Oligonucleotides," Ann. Rev. Biochem. 53:323-356 (1984).	
/JSB/	18.	Johnstone, et al. "Immunochemistry in Practice", Blackwell Scientific Publications, "209-216 and 241-242 (1982).	
/JSB/	19.	Khrapko, et al., "Hybridization of DNA with Oligonucleotides Immobilized in Gel: A Convenient Method for Detecting Single Base Substitutions," Mol Biol (Mosk) (USSR) 25(3):718-730 (translation page No. 581-591) (1991)	
/JSB/	20.	Kitawaga, et al., "Comparison of Poly(A)-Poly(dT)and Poly(I)-Poly(dC) as Immunogens for the Induction of Antibodies to RNA-DNA Hybrids," Mol. Immunology 19(3):413-420 (1982).	
<del>duplicate</del>	<del>21.</del>	<del>Lamoureux, et al., 1997 "Detection of Campylobacter Jejuni in Food and Poultry Viscera Using Immunomagnetic Separation and Microtitre Hybridization" J. Appl. Microbiol. 83:641-651.</del>	
<del>duplicate</del>	<del>22.</del>	<del>Lazar et al. 1999 "Hybrid Capture R: a Sensitive Signal Amplification based Chemiluminescent Test for the Detection and Quantitation of Human Viral and Bacterial Pathogens" J. Clin. Ligand Assay 22:139-151.</del>	
<del>duplicate</del>	<del>23.</del>	<del>Leimon et al. Hybridization analyses of arrayed cDNA libraries. Trends in Genetics vol. 7, pp. 314-317 (1991).</del>	
/JSB/	24.	Lesnick, et al., "Relative Thermodynamic Stability of DNA, RNA, and DNA-RNA Hybrid Duplexes: Relationship with Base Composition and Structure," Biochemistry 34:10807-10815 (1995).	
<del>duplicate</del>	<del>25.</del>	<del>Lookhart et al., Expression monitoring by hybridization to high density oligonucleotide arrays, Dec. 1996, Nature Biotechnology, vol. 14, pp. 1675-1680.</del>	
<del>duplicate</del>	<del>26.</del>	<del>Meldonado-Rodriguez et al., Hybridization of Glass Tethered Oligonucleotide Probes to Target Strands Preannealed with Labeled Auxiliary Oligonucleotides, 1999, Molecular Biotechnology, vol. 11, pp. 1-12.</del>	
/JSB/	27.	Maniatis, et al., Molecular Cloning: A Laboratory Manual (New York, Cold Spring Harbor Laboratory, 1982).	
/JSB/	28.	Maskos et al., "Oligonucleotide Hybridizations On Glass Supports: A Novel Linker For Oligonucleotides Synthesis and Hybridisation Properties of Oligonucleotides Synthesized <i>In Situ</i> ," Nucleic Acids Research 20:1679-1684 (1992).	
Examiner Signature	/John S. Brusca/		Date Considered 05/10/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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		<b>NON PATENT LITERATURE DOCUMENTS</b>	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
/JSB/	29.	McGraw et al., "Sequence-Dependent Oligonucleotide-Target Duplex Stabilities: Rules from Empirical Studies with a Set of Twenty-Mers," Biotechniques 8(6):674-678 (1990).	
/JSB/	30.	Means, et al., "Chemical Modifications of Proteins: History and Applications," Bioconj. Chem. 1:2-12 (1990).	
/JSB/	31.	Mierendorf, et al., "Sequencing RNA Transcripts Synthesized in Vitro from Plasmids Containing Bacteriophage Promoters," Methods. Enzymol. 152:563-566 (1987).	
/JSB/	32.	Narang, et al., "Chemical Synthesis of Deoxyoligonucleotides by the Modified Triester Method," Methods Enzymol. vol. 65, Chapter 61, pp. 610-620 (1980).	
duplicate	33.	<del>Newman et al., 1989 "Solution Hybridization and Enzyme Immunoassay for Biotinylated DNA:RNA Hybrids to Detect Enteroviral RNA in Cell Culture" Mol. Cell Probes 3:375-382.</del>	
/JSB/	34.	Pease, et al., "Light-generated oligonucleotide arrays for rapid DNA sequence analysis," Proc. Natl. Acad. Sci. USA 91(11):5022-5026 (1994).	
/JSB/	35.	Rychlik, et al., "Optimization of the annealing temperature for DNA amplification in vitro," Nucleic Acids Res. 18(21):6409-6412 (1990).	
/JSB/	36.	Sambrook et al., Molecular Cloning: A Laboratory Manual, 2nd Edition (Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y.) 1989) Chapters 5, 6).	
/JSB/	37.	Skena, et al., "Quantitative Monitoring of Gene Expression Patterns with a Complementary DNA Microarray," Science 270:467-470 (1995).	
duplicate	38.	<del>Southern E. M., "DNA Chips: Analysing Sequence by Hybridization to Oligonucleotides on a Large Scale," TIG March, 1996 12(3): 110-115.</del>	
/JSB/	39.	Southern E. M., "Detection of Specific Sequences Among DNA Fragments Separated by Gel Electrophoresis," J. Mol. Biol. (1975) 98, 503-517.	
/JSB/	40.	Stimpson, et al., "Real-time detection of DNA hybridization and melting on oligonucleotide arrays by using optical wave guides," Proc. Natl. Acad. Sci. USA 92:6379-6383 (1995).	
duplicate	41.	<del>Stettin, D.D. and A. Rashtchian, 1987 "Immunochemical Approaches to Gene Probe Assays" Anal. Biochem. 161:387-394.</del>	
/JSB/	42.	Stuart, et al., "Location of the 18/28S ribosomal RNA genes in two Hawaiian Drosophila species by monoclonal immunological identification of RNA-DNA hybrids <i>in situ</i> ," Proc. Natl. Acad. Sci. USA 78(6):3751-3754 (1981).	
/JSB/	43.	Syvanen, et al., "Fast quantification of nucleic acid hybrids by affinity-based hybrid collection," Nucleic Acids Res. 14(12):5037-5048 (1986).	
Examiner Signature	/John S. Brusca/		Date Considered 05/10/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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